20

25

CLAIMS

- 1. An iontophoresis device activated in use comprising: an absorber formed of a material containing a dry drug and capable of absorbing a liquid; a wall material disposed around said absorber and having an adhesive layer on the undersurface thereof; a support disposed on said absorber and said wall material, having an opening in the central portion thereof; an electrode disposed on the undersurface of said support; and a diaphragm disposed on said support; and a dissolution liquid reservoir disposed on said diaphragm, retaining a dissolution liquid for dissolving said drug between said diaphragm and itself, and having a protruding portion for destroying said diaphragm by pressing force.
- 2. The iontophoresis device activated in use according to claim 1, further comprising a solution permeable film on the undersurface of said absorber.
 - 3. The iontophoresis device activated in use according to claim 1, further comprising a liner on the undersurface of both said absorber and said adhesive layer, wherein said liner has a concave portion opposed to said absorber.
 - 4. An iontophoresis device activated in use comprising: a drug-containing layer containing a dry drug; an absorber disposed on said drug-containing layer and formed of a material capable of absorbing a liquid; a wall material disposed around said absorber, having an adhesive layer on the undersurface thereof; a support disposed on said absorber and said wall

HM1041PCT - 46 -

5

10

material, having an opening in the central portion thereof; an electrode disposed on the undersurface of said support; a diaphragm disposed on said support; and a dissolution liquid reservoir disposed on said diaphragm, retaining a dissolution liquid for dissolving said drug between said diaphragm and itself, and having a protruding portion for destroying said diaphragm by pressing force.

- 5. The iontophoresis device activated in use according to claim 4, further comprising a liner on the undersurface of both said drug-containing layer and said adhesive layer, wherein said liner has a concave portion opposed to said drug-containing layer.
- 6. An iontophoresis device activated in use comprising: a support; an electrode disposed on the upper surface of said 15 support; an absorber disposed on said support and said electrode and formed of a material containing a dry drug and capable of absorbing a liquid; a wall material disposed around said absorber on said support, having an adhesive layer on the upper surface thereof; a liner disposed on said absorber and said 20 adhesivelayer, having an opening in the central portion thereof; a diaphragm disposed on said liner; and a dissolution liquid reservoir disposed on said diaphragm, retaining a dissolution liquid for dissolving said drug between said diaphragm and itself, and having a protruding portion for destroying said diaphragm by pressing force. 25

HM1041PCT - 47 -

- 7. The iontophoresis device activated in use according to claim 6, further comprising a solution permeable film on the upper surface of said absorber.
- 8. An iontophoresis device activated in use comprising: 5 a support; an electrode disposed on the upper surface of said support; an absorber disposed on said support and said electrode and formed of a material capable of absorbing a liquid; a wall material disposed around said absorber on said support, having anadhesivelayerontheuppersurfacethereof; adrug-containing 10 layer disposed on said absorber, containing a dry drug; a liner disposed on said drug-containing layer and said adhesive layer, having an opening in the central portion thereof; a diaphragm disposed on said liner; and a dissolution liquid reservoir disposed on said diaphragm, retaining a dissolution liquid 15 for dissolving said drug between said diaphragm and itself, and having a protruding portion for destroying said diaphragm by pressing force.
- 9. The iontophoresis device activated in use according to any one of claims 1 to 8, wherein the dissolution
 20 liquid-contacting portion of said diaphragm has an oval form, and that the protruding portion of said dissolution liquid reservoir has a linear apical portion that extends in the longitudinal direction of said oval form.
- 10. The iontophoresis device activated in use according to claim 9, wherein assuming that the length of said linear apical portion is given by L1 and the length of the dissolution liquid-contacting portion of said diaphragmin the longitudinal

HM1041PCT - 48 -

5

10

20

25

direction is given by L2, the relationship of $0.1 \times L2 \le L1 \le 0.5 \times L2$ is satisfied.

- 11. The iontophoresis device activated in use according to any one of claims 1 to 8, wherein the dissolution liquid-contacting portion of said diaphragm has a round form, and that the protruding portion of said dissolution liquid reservoir has cross-shape apical portions.
- 12. The iontophoresis device activated in use according toclaim10, whereinassumingthat the lengths of said cross-shape apical portions are given by L10 and L11 and the diameter of the dissolution liquid-contacting portion of said diaphragm is given by L2, the relationships of $0.1 \times L2 \le L10 \le 0.5 \times L2$ and/or $0.1 \times L2 \le L11 \le 0.5 \times L2$ are satisfied.
- 13. The iontophoresis device activated in use according to any one of claims 1 to 5, wherein the peripheral portion of the opening of said support is dented to said absorber side more than the rest of said support.
 - 14. The iontophoresis device activated in use according to any one of claims 1 to 5, wherein said support is inclined so that the opening is closer toward said absorber side than the peripheral portion of said support.
 - 15. The iontophoresis device activated in use according to any one of claims 6 to 8, wherein the peripheral portion of the opening of said liner is dented to said absorber side more than the rest of said liner.
 - 16. The iontophoresis device activated in use according to any one of claims 6 to 8, wherein said liner is inclined

+ 49 -

5

10

20

so that the opening is closer toward said absorber side than the peripheral portion of said liner.

- 17. The iontophoresis device activated in use according to any one of claims 1 to 16, wherein said dissolution liquid reservoir is formed by processing of a sheet material, and in that said sheet material has a water vapor permeability of 0.22 $g/m^2 \cdot 24$ hr or less.
- 18. The iontophoresis device activated in use according to claim 17, wherein said sheet material has a thickness between about 250 and about 350 μm .
- 19. The iontophoresis device activated in use according to claim 17, wherein said sheet material comprises a cyclic polyolefin copolymer film.
- 20. The iontophoresis device activated in use according to claim 17, wherein said sheet material is a laminated film consisting of a cyclic polyolefin copolymer film and a polyolefin film.
 - 21. The iontophoresis device activated in use according toclaim17, whereinsaidsheetmaterialcomprises afluorocarbon resin film.
 - 22. The iontophoresis device activated in use according to claim 17, wherein said sheet material is a laminated film consisting of a fluorocarbon resin film and a polyolefin film.
- 23. The iontophoresis device activated in use according to any one of claims 1 to 22, wherein said diaphragm is an aluminum foil.